

Title (en)  
METHOD FOR MEASURING A POSITION

Title (de)  
VERFAHREN ZUR POSITIONSMESSUNG

Title (fr)  
PROCÉDÉ DE MESURE DE POSITION

Publication  
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Application  
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Abstract (en)  
[origin: WO2011098274A1] The invention relates to a method for measuring a position, comprising a magnet (2) and a sensor (3) detecting the magnetic field strength of the magnet (2). The magnet (2) and/or the sensor (3) interact with a moveable element (4), wherein by means of the moveable element (4), a relative movement between the sensor (3) and the magnet (2) can be effected. The position of the moveable element (4) in accordance with the coordinates (x, y, z) in a coordinate system can be ascertained by means of the magnetic field (5) detected by the sensor (3) and generated by the magnet (2). The sensor (3) ascertains the components of the magnetic field strength (Bx, By, Bz) of the magnetic field (5) that act in the sensor (3) at a location (7) in three, linearly independent spatial directions (6). The magnet (2) generates an analytically describable magnetic field (5). Each coordinate x, y, z along a coordinate axis (6) of the coordinate system in a half-space of the magnetic field (5) is determined individually and unambiguously by the combination of the components of the magnetic field strength (Bx, By, Bz) detected by the sensor (3) in all spatial directions (6) of the coordinate system.

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